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ABSTRACT

This project developed an informal reading test from adult basic education teaching materials and investigated reading performance at six levels among adults attending basic education classes. Graded word lists, readiness oral reading passages, and graded oral reading passages were administered to 37 adults. The six most discriminating word lists were identified, along with six pairs of adult interest reading passages having similar readability levels and producing similar error scores. The work identification test, the warm-up passage, and a form of the informal oral reading test were then given to 56 adults. (The first two instruments helped determine the difficulty level at which testing could begin.) Substitutions, examiner help, and added or omitted word endings were the most prevalent errors. Poor readers required more words pronounced than better readers. Reading speeds of better readers began to decline by the seventh level while error rates and comprehension remained steady. Comprehension remained fairly consistent for all levels of readers. The average adult answered three out of five factual questions correctly. (author/ly)

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THE DEVELOPMENT OF INFORMAL TESTS OF READING AND THE ANALYSIS OF THE READING PERFORMANCE OF ADULTS ATTENDING BASIC EDUCATION CLASSES

Robert E. Leibert

The Curators of the University of Missouri
for the University of Missouri - Kansas City

September 1969

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Health, Education, and Welfare

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Summary

This project was undertaken (1) to develop an informal reading test from instructional materials employed in Adult Basic Education classes which would provide an estimate of reading performance at each level, and (2) to collect and analyze data on the reading performance of adults attending ABE classes.

The informal test was to consist of a graded word list, a readiness or warm-up oral reading passage and two equivalent sets of graded passages for oral reading. Sample word lists were developed from three word lists. Passages of approximately one hundred words each were collected from a variety of ABE materials representing six levels of difficulty from first to tenth level difficulty. The word lists and passages were then administered to thirty-seven adults attending ABE classes.

From this data the most discriminating word lists were identified: four lists of twenty words each from the Botel Bucks County List and two lists of thirty words each from the Mitzel Functional Reading Word List for Adults. Six pairs of passages were identified which had similar readability levels, produced similar error scores and were of interest to the adults. Five factual recall questions were composed for each passage.

Fifty-six adults were administered the word identification test, the warm-up passage and one of the two forms of the informal oral reading test. The word identification test and the warm-up passage were found to be useful in determining the level of difficulty with which the oral reading test could be initiated. Four types of word recognition errors were found to be most prevalent: substitutitions, examiner help, and addition and omission of word endings. Poor readers required more words pronounced than better readers. Rate of reading for the better reader began to decline by seventh reader level while the error rate and comprehension remained steady. Rate may be the most sensitive indicator of passage difficulty for the adult. Comprehension remained fairly consistent for all levels of readers. The average adult answered correctly three out of the five factual questions.

The results obtained from the informal test developed suggests that the concept of informal testing is appropriate for ABE classes and yields information concerning word identification, rate of reading, type of errors and comprehension which should help in planning an individual reading program.

INTRODUCTION

BACKGROUND AND SIGNIFICANCE

Review of Literature. At present there is little published information describing the reading performance of adult illiterates, nor are there tests for diagnosing the specific instructional needs of this population. Hill (1965) indicated a need for more specific and related tests for adults.

Recent research indicates that investigators studying the adult illiterate have used the standardized silent reading tests available which were designed for elementary and secondary pupils. Whittemore, et al (1966) attempted to determine the most useful tests for assessing the abilities of adult trainees which would provide data helpful to teachers. Two standardized reading tests (Iowa Silent Reading Test and the Gates Reading Survey) were rated as useful because they both recorded an improvement in the population after training. Both tests were designed and normed on elementary and secondary school pupils. Krebs (1966) used a battery of reading and arithmetic tests to measure the effects of a program on functionally illiterate adults. In a doctoral thesis, Drane (1967) used the Nelson Reading Test to measure the effects of a literacy program. Again the tests employed were standardized tests used for assessing general reading achievement for another population. One investigator, Clifton (1966), used the Gray Oral Reading Test to obtain a grade equivalent score for his subjects. While this test can be used for more diagnostic information than regular silent standardized tests, it was not used in this manner. This test is also normed on pupils in grades 1-8.

Some investigators allude to the diagnostic information available, however, (1) the tests used were survey or general reading achievement tests and not diagnostic instruments; and (2) the tests were designed for a younger population. Generally these investigators used the tests as an indicator of the level of reading competence and secondly as a measure of progress.

Three conclusions can be drawn from the literature, first is that these investigators have not drawn upon the procedures of reading diagnosis currently being used in schools by reading teachers, or in reading clinics. Second,

none have reported the development of either procedures or instruments for diagnostic evaluations. Third, no description is apparently available of the type of reading performance to be expected from adult illiterates.

Local Adult Basic Education (ABE) programs, like many others, screen new adult class members through the use of standardized tests. The results are reported in grade placement or other norm based scores.

Standardized reading tests have long been employed as a means of measuring the growth of groups of pupils. However, diagnostic or informal testing procedures with elementary and secondary pupils that are individually administered yield much more specific data concerning the reading ability of the pupil than most group-type survey achievement tests. A teacher's initial concern is to determine the instructional focus for each individual. Increasing reading power basically means that a person can read material of greater difficulty. Numerous investigators have identified a discrepancy between the level of performance achieved on a standardized reading test and the ability to perform successfully in classroom situations with materials of equivalent difficulty (Betts (1940), Botel (1957), Daniel (1962), Killgallon (1942),McCracken (1962), Sipay (1961).)

Responses to items on standardized group reading tests can conceal valuable diagnostic information concerning the reader's actual performance. Leibert (1965) found great differences in the actual reading ability of third grade pupils even though they had received the same grade placement score on a standardized test. He concluded that a standardized test grade level score could not be interpreted to mean that the pupil could read material at that level of difficulty with fluency and comprehension.

Thus, while the standardized test is a great help in detecting changes in reading performance or measuring progress, the scores are not easily translated into specific instructional needs.

Purposes of Project. The purposes of this project are (1) to develop informal instruments specifically designed for adult illiterates which can be used as a means of describing the reading performance of these adults, and (2) to collect and analyze data describing the reading performance of adults attending ABE classes to provide baseline data on these adults.

Informal reading tests refer to tests developed from materials normally engaged in the instructional program. As employed in classrooms and clinics these tests include

a series of word lists and passages of increasing difficulty. In general practice little effort is made to check for the validity or reliability of the informal test. Scoring is based on the performance at each level of difficulty rather than on an accumulation of points to be related to a norm population. Instead of simply providing total scores on word identification and comprehension, the informal reading test provides information on the abilities of the reader in pronouncing words, reading in oral situations and demonstrating understanding of each selection. Each of these broad areas can in turn be analyzed into more specific observable reading behaviors.

METHODS. Procedures in this project are divided into three stages. The first stage of the project was to construct the specific components of the informal tests. Next these pilot tests were administered to thirty-four adults enrolled in ABE programs to determine the discrimination characteristics of the test components and establish two comparable forms. The final stage was a checking of the resulting instrument and the collection of data describing the reading performance of adults.

First Stage: Word Identification Tests were constructed by randomly selecting words from three established word lists. The Botel (1963) or Bucks County graded list contains words through third grade whose level of difficulty is common to five widely used basal reading series. Basal readers, which provide the basic instructional material in reading for most elementary schools, are characterized by a series of books usually from pre reading through eighth grade which have a controlled vocabulary. It was hypothesized that these levels might still discriminate among adult illiterates. Twenty words were randomly selected from each of the seven book levels represented in the Botel or Bucks County list (Pre-Primer (PP), Primer (P), First Reader (1), Second Reader - 1 (or second reader, part 1), Second Reader - 2 (also written 2^2), 3^1 and 3^2). Two other lists were used to provide samples of words at levels higher than third grade--the Dale (1948) list of 3,000 words and Mitzel's (1966) Functional Reading Word List.

The Dale List is not divided into levels of difficulty so the list was arbitrarily divided into six 500 word groups from which twenty words were randomly selected and placed in lists labeled A to F. The Mitzel list was divided into four parts and 30 words were randomly selected from each part. Ten more words were used because the basic list was longer, and thirty words provided a better sample.

Reading Passages. Passages were selected from instructional materials employed in the local ABE program. Four passages were sought from each of the following seven levels of difficulty:

First reader level
Second reader level
Third reader level
Fourth-fifth reader level
Fifth-sixth reader level
Seventh-eighth reader level
Ninth-tenth reader level

The passages were selected on the basis of potential interest or appeal and readability levels. Readability or difficulty of material was determined by the Spache (1953) formula for levels 1-3 and the Dale-Chall (1948) formula for fourth and above. These two formulas were employed because they are based on the similar factors (number of hard words, sentence length and a constant).

Four passages of approximately 100 words each were located for each of the seven levels (see Appendix J). One passage was written by the research assistant because she had difficulty finding a fourth selection at the first reader level.

An additional passage was constructed to act as a warm-up or preparatory passage to precede the actual testing. Experience with classroom and clinic testing suggests that sometimes the initial passage is read more poorly than the selections which follow. A preliminary passage was sought to reduce the effects of initial anxiety upon testing results which is especially detrimental to the assessment of the reading performance of very poor readers.

Revised from an article entitled "The Case Worker," the selection was rewritten to be progressively more difficult. Sentences were arranged to approximate the pre-primer level through eighth reader level difficulty. This was accomplished by rewriting each pair of sentences to approximate the standards for readability at that level. Basic dterminers of difficulty in the Spache and Dale-Chall formulas--average sentence length and number of hard words--were used as guides in the revision.

While the exact difficulty of the sentence pairs might be questioned, the procedure does provide a way of developing a passage of increasing difficulty. The passage should provide a warm-up for the "reader" and at the same time yield some estimate of his reading ability.

Trial Materials. Each type of material (word list and passages) was prepared in two forms, one for the "reader" and one for the "examiner." The "reader's" copy was reproduced in large type (see Appendix G) to increase the legibility especially important to the weaker reader. The examiner's copy was typed in standard type, duplicated the reader's copy for words on a line and was double-spaced. (Appendix C). Double spacing provided room to record errors in reading performance.

Stage Two: The three word lists and the twenty-nine passages were then administered to adults enrolled in ABE classes in Kansas City, Missouri.

Originally the passages were to be administered to twenty adults. However, the total test was too long to administer to each adult. Therefore, the procedure was revised to obtain a sample of reading performance representative of each of three levels of reading ability (I - 1 to 3; II - 4 to 6; III - 7 to 10 level difficulty).

Administration of Trial Tests. All word lists and passages were administered individually by the project director and the research assistant. The research assistant was working on her Master's degree with a specialization in reading, was an experienced reading teacher and a former ABE instructor.

After rapport was established the word lists were administered. The adult was given his copy of the words and asked to read them out loud to the examiner. While the adult was pronouncing the words, the examiner recorded any response that was at variance with the stimulus word. (See Appendix I for complete administration directions.) When the words became very difficult for the adult (missing from 1/3 to 1/2 of the words) the testing was terminated.

Following the word list the adult was asked to read certain passages from the trial set of passages, starting first with the "Case Worker." The examiner started at a level of passage difficulty which corresponded with the reader's performance on the word lists. For example, if the adult had great difficulty with the easy words he was asked to start with the easiest passages--level I.

When the adult had finished reading the passages he was asked to comment upon and rate how well he liked the passages.

Selection of Passages. Two passages were sought at each level which were comparable in difficulty and each of which was rated as interesting to adults. The total errors

for each adult reader on the word lists and passages read was then tabulated. From this tabulation word lists and passages were to be selected which were comparable in terms of error rates and which demonstrated sequential difficulty. Two forms of the test were to be assembled.

For each of the passages selected a one or two sentence statement was written to introduce the reader to the idea in the passage. Next, five factual questions were constructed for each passage. Factual questions were chosen because they are easier to formulate and would require less revision than higher level questions.

Stage Three: The two forms were reproduced in two sets--one for the examiner and one for the reader as previously described. Sixty adults were to be randomly assigned to one of the two forms. The order of test components was (1) the word list, (2) the "Case Worker," and (3) the graded passages. As before, a distribution of reader competence was sought for testing.

Adult Performance. A tabulation of errors was made following the testing. Total errors were listed for each adult reader for each word list and each passage. A second count was made tabulating rate of reading, comprehension and specific type of word recognition error made. The initial trial of passages helped to modify the error analysis categories as follows:

Usual categories	Expanded categories
substitutions	omissions (letters)
omissions (whole words)	addition (letters)
addition (whole words)	
examiner help	
hesitations	

Percentages of error type were also computed for each passage.

FINDINGS AND ANALYSIS

Word List--Bucks County. A series of word lists were sought which would discriminate among readers with varying degrees of word recognition ability. Eleven of the twenty-four adults who were administered these words had perfect scores and were not included in the error analysis.

TABLE I

Error Analysis of the Buck's County Word List

Level	PP	P	1^2	2^1	2^2	3^1	3^2
Total right	240	209	201	194	168	165	130
n=13							
$\bar{x}$	18.4	16.0	15.5	15.0	13.0	12.7	10.0

An inspection of the results indicates that several levels did not discriminate effectively (e.g. P - 2^1 and 2^2 - 3^1). Therefore, the four most clearly different levels were selected for the final word list - PP, 1^2, 2^2 and 3^2.

These four lists of twenty words each would provide a screening for basic words. By eliminating three lists the administration time would also be decreased.

Word List - M.A. Mitzel. Four lists of thirty words each were compared to check the discrimination among levels.

Table 2

Error Analysis M.A. Mitzel List

Level	I	II	III	IV
Total Right	896	806	683	641
(n=31) $\bar{x}$	28.9	26.0	22.0	20.6

While there is a gradual decrease in performance across levels, lists I and IV appear to be most distinctive and were chosen for the final test.

Word List - Dale List. After administering seven of these tests, it was obvious that this word test was not furnishing information different from the other two lists and the performance was fairly regular across the six lists. Thus, this word list was eliminated.

Passages. Passages were to be selected on the basis of interest and increasing difficulty. The error scores and ratings were tabulated for each s lection. Originally the plan was to develop a test ranging from pre-first through the sixth reader level to coincide with ABE Level I and II participants. Passages as low as the first reader level were so difficult to find that the research assistant wrote one at the first reader level. Only the first several sentences of the Case Worker were lower than the first reader level. On the other hand, so many of the selections in the adult reading materials were written at the sixth level and above that four selections above the sixth level were included.

Table 3

Error Scores - Ratings for Passages

Passage	1	2	3	4	5	6
Readability	1.6	1.8	1.9	1.9	2.0	2.0
Σx	26	34	36	19	17	28
n	11	9	10	9	9	8
x̄	2.3	3.8	3.6	2.1	1.9	3.5
Rating						
High Interest	9	3	4	5	0	3
Average	0	0	0	0	0	1
Dislike	0	0	1	0	1	0

Spache gives the following interpretation to the readability scores--primers 1.5, first readers 1.8 and 1.9, second readers 2.1 and 2.7, and third readers 3.3 and 3.7 Selections one through six were considered to cluster about the first reader level and selections seven through ten were considered to represent second reader level.

Passages one and four were selected as parallel selections at the first reader level for several reasons. First, the mean error scores were similar and represented a middle difficulty among the six and they were also rated the highest by the adults who read them.

It should be noted that the reader was asked to identify those passages he liked best and to name any that were not liked. Therefore, not every passage read was rated. The first three choices are listed as high interest passages and the next three as average choices. Those expressly disliked were counted in the third category.

Table 4

Error Scores & Ratings for Passages 7 - 10

Passage	7	8	9	10
Readability	2.1	2.2	2.2	2.4
Σx	19	24	10	27
n	6	6	5	6
$\bar{x}$	3.2	4.0	2.0	4.5
Rating				
High Interest	2	4	0	1
Average	0	1	0	0
Disliked	1	0	0	1

Passages seven and eight were selected as parallel selections at the second reader level. They appeared to be somewhat more difficult than the two selected at first reader level and they were also rated somewhat more favorably than passages nine and ten.

Table 5

Error Scores and Ratings for Passages 11 - 6

Passage	11	12	13	14	15	16
Readability	2.7	2.8	2.8	3.0	3.3	3.3
Σx	23	14	21	29	38	46
n	6	5	5	13	12	11
$\bar{x}$	3.8	2.8	4.2	2.2	2.3	4.2
Rating						
High Interest	4	1	5	9	1	3
Average	2	4	0	4	7	5
Dislike	0	0	0	0	4	3

These passages are considered to be in the high second to beginning third reader range. Since there is a difference in the subjects who read selections eleven - thirteen and fourteen - sixteen the mean error score may not be equivalent for these two groups of selections. A decision was made to choose two passages of similar readability and error rates. Thus, passages eleven and thirteen were chosen.

Table 6

Error Scores and Ratings for Passages 17 - 23

Passage	17	18	19	20	21	22	23
Readability	4-5	4-5	4-5	4-5	5-6	5-6	5-6
Σx	43	7	16	17	81	58	25
n	12	11	10	11	23	22	22
$\bar{x}$	3.6	.6	1.6	1.5	3.5	2.6	1.1
Rating							
High Interest	1	5	5	9	4	3	8
Average	1	3	2	1	3	3	4
Dislike	4	1	2	0	10	7	3

Passages nineteen and twenty were selected to represent the 4 - 6 level of reading difficulty. Again, two passages were selected from the same readability range which were also reasonably popular with the readers.

Table 7

Error Scores and Ratings for Passages 24 - 27

Passage	24	25	26	27
Readability	7-8	7-8	9-10	9-10
Σx	42	35	61	45
n	19	20	20	19
$\bar{x}$	2.2	1.8	3.0	2.4
Rating				
High Interest	8	13	7	9
Average	3	4	4	3
Dislike	2	0	1	0

The remaining four passages were included in the test package, two representing 7-8 level and two representing 9-10 level of difficulty.

These passages are reasonably close in terms of average errors and were well liked by the adults who read them.

The test package (Appendix A - H) was thus formed with six lists of words from pre first to adult, a warm-up passage and two paralleled sets of six passages from first reader level to adult (i.e. 1^2, 2, 2-3, 4-5, 7-8, 9-10).

Observations. During this trial the following observations were made concerning the adults in the sample. All the adults were Negro except two. The age of the participants ranged from 18 to 70. Most of these adults had previously lived in one of the states of the deep south. All were willing to read for the examiners. Of the thirty-seven in the sample only five were men.

The adults were often better readers than considered by the teacher or even the adult himself. When attacking unfamiliar words on the word identification lists, the most common method was spelling the word and then attempting to pronounce it. Many adults frequently omitted the endings of words such as s, ed, and ing.

These adults consistently chose stories related to their ethnic heritage or stories related to work, education and manners. Stories suggesting violence were strongly rejected. This may be because of the high female population or a reaction against any identification with violence.

Analysis of Adult Performance- Word Lists. Adult performance on the word lists was compiled in terms of total errors for each word list. To check the effectiveness of this test to discriminate among different abilities of readers, the scores were separated into five groups. Each group represents those adults who had read the same passages on the oral reading test. The decision concerning which passages to have the adult read was based upon the performance on the word lists. Thus, group I is comprised of readers who were judged to be able to handle only the easy passages and group V contains adults who were selected to read the two most difficult passages.

TABLE 8

Mean Error Scores on the Word Lists for All Adults

Level		PP	1^2	2^2	3^2	I	II
Group	n						
I	6	3.1	3.6*	4.0*	9.8*	8.0**	15***
II	8	.25	1.7	3.1	5.5	4.5	15
III	13	.07	.3	1.2	1.7	1.0	6.7
IV	14	0	.07	.3	.9	.07	4.0
V	14	0	.07	.2	.3	.1	1.8
T	55	.4	.7	1.2	2.4	1.4	5.8

*n=5 **n=3 ***n=2

The results of the performance on the word lists is consistent with the nature of the test. All groups made progressively more errors as the lists increased in difficulty. The notable exception is List I of the M.A. Mitzel Word List. This list seems to be less difficult for some adults than the 3^2 list. List II produced more errors than any of the other lists and is apparently sufficiently difficult for the better performing adults of the local ABE programs included in this project.

Each group made more average errors per list than the next higher group. Also, the totals averaged across groups reflected the increasing difficulty of each list with the one exception noted.

The consistency of the performance by groups indicates that the Word Identification Test relates well with oral reading performance. Therefore, this test will not only provide information concerning the strength of word identification, but will also aid in determining the ppassages to be read on the oral reading section.

An analysis of individual performance on the word lists suggests that the Mitzel I list can be effectively used as a screening test for the Botel list. If the adult makes less than six errors on the Mitzel I list, it is unlikely that he will make many errors on the Botel list. (See Appendix L) Therefore, an examiner might choose to skip the Botel List when the performance is high on the Mitzel I List.

It is interesting to note that even the more able readers were not free from errors in basic words. Fourteen of the twenty-seven adults who read the two highest passages made one or more errors on the Botel list. This is unlike the general elementary and secondary population.

Analysis of Adult Performance - Passages. The following comparisons were made among adults who read the same series of passages, that is, started with and concluded with the same passage. In several cases in group I the passages became too difficult and the testing was terminated.

TABLE 9

Mean Scores for Errors, Rate and Comprehension Form A

Passage	1	2	3	4	5	6	Case Worker
Gp I							
Errors	5.3	6.7	4.0	8.0			18.7
Rate	71	50	62	63			59.7
Comp.	4.5	3.8	2.5	1.7			
n=	3	2	2	2			
Gp II							
Errors		6.7	6.5	3.7	7.5	11.3	3.8
Rate		100	94	101	76	79	111
Comp.		3.5	3.9	3.7	3.4	3.3	
n=	4						
Gp III							
Errors			.8	1.0	1.0	2.2	2.5
Rate			126	135	123	106	137
Comp.			4.1	4.4	5.0	3.6	
n=	4						
Gp IV							
Errors				.5	1.2	1.7	1.0
Rate				124	113	103	136
Comp.				4.0	4.2	3.7	
n=	8						

Passage	1	2	3	4	5	6	Case Worker
Gp V							
Errors					1.9	3.4	10
Rate					159	133	170
Comp					4.7	4.3	
n= 10							

A generally predictable trend is observed in this table, namely, that errors tend to increase across levels and rate tends to decrease. Two notable exceptions are Passage 3 for the first group and Passage 4 for the second group, both of which have a lower average error score than the two scores which bound that score. Comprehension seems to remain fairly stable for all groups except the very poor reader, for whom there is a notable decrease across levels.

The trends are influenced by the fact that not all adults read every passage. If all passages had been read the error rates would have decreased and the rates increased for the easier passages.

TABLE 10

Mean Scores for Errors, Rate and Comprehension Form B

Passage	1	2	3	4	5	6	Case Worker
Gp I							
Errors	9.0	6.0	11.0	9.5			18.0
Rate	52	46	89	76			54.5
Comp	3.7	3.7	2.0	4.0			
n=	4	3	2	2			
Gp II							
Errors		2.2	2.7	1.7	10.2	20	19.0
Rate		90	75	79	48	46	94
Comp		4.0	3.7	4.5	2.0	3.7	
n= 4							

Passage	1	2	3	4	5	6	Case Worker
Gp III							
Errors			2.0	2.1	6.7	9.8	3.4
Rate			116	113	106	78	135
Comp			3.3	4.2	2.9	1.8	
n= 9							
Gp IV							
Errors				.8	2.3	3.8	1.3
Rate				168	110	109	168
Comp				4.8	3.2	2.4	
n= 6							
Gp V							
Errors					4.6	3.3	2.0
Rate					114	138	159
Comp					3.1	4.3	
n= 4							

Results from Form B generally indicate the same trend noted in the first form. In this sample flucuations in performance are also observed. Since the deviation does not appear for each group for the same passage, it is likely that the fluctuation is a characteristic of that group rather than a factor of the test passage.

McCracken (1969) suggested minimum oral reading rates by book level difficulty for pre-first through seventh. He suggested these rates as one standard by which to judge the adequacy of reading performance at each level.

These standards were used in the next table to serve as a comparison with rate of reading for each passage by the readers in this project.

TABLE 11

Comparison of Rate by Passage with the McCracken Standard

Passage	1	2	3	4	5	6
McCracken Std.	60	70	90	120	150	150 (est)
Median Rate	70*	55*	108*	128*	117	109
Per cent achieving standard	71	85	84	66	35	14

*Meets McCracken standard at that level (within 15 w/m)

When these minimum rate standards are considered, a high percentage of readers were able to meet the standard through the third passage. Few readers were able to attain the suggested rate for the last two passages. While error rate and comprehension are fairly consistent (Table 9 and 10) for groups IV and V, there is a rapid median rate decrease and a lower percentage of readers who attain the standard at these two levels.

These results suggest that rate might be the most sensitive indicator of difficulty for the adult in ABE classes.

Case Worker Passage. The passage, the Case Worker, relates fairly well with the general test performance. Low rates and high error scores are associated with groups I and II, and higher rates and low error scores are associated with groups IV and V. It appears that the warm-up passage, the Case Worker, can be used along with the word list as an indicator of adult reading performance. That is, the adult's performance on this test should offer some help in determining which passages of the oral reading test should be read. Since time is always a major consideration in the selection of tests, the possibility of shortening a test without losing valuable information is quite important to the teacher.

In the main, the passages discriminated among groups of readers either by error rate or rate of reading. There is a great variability in the skills and abilities that an adult, or other reader, brings to bear during oral reading. Two readers may make the same number of errors while reading, however one may read very haltingly and the other fairly smoothly.

Comprehension can also operate independently of either rate or accuracy (error rate). Thus, a few adults read

quite accurately and rapidly, but did not comprehend well (two or fewer comprehension questions correct). For others the reverse trend was true; they comprehended even though they experienced great difficulty in pronouncing the words.

Comprehension seemed fairly stable in relation to groups and levels of difficulty. People working in the ABE program expected the comprehension to be low. According to this sample, the overall average was 3.3 (66%) with a range of 1.7 to 5.0. A score of three will be considered acceptable for this test. This is not high, considering that the questions require only factual recall, but it is reasonable because there are just five questions.

There was some tendency for these adults to do about the same on several passages and then suddenly begin to make more errors. Elementary pupils generally show a more steady decrease in performance although secondary pupils begin to show this same plateauing effect.

The results of this broad analysis of total errors indicates that the test is sensitive to changes in performance and that it provides a source for a detailed analysis of that performance.

Analysis of Adult Performance - Types of Errors. Errors made during oral reading were categorized in the following ways:

Substitution -	one word pronounced for another (then for when)
Omission -	a word left out of a sentence
Omission - ending	ending of a word omitted (come for comes)
Addition -	a word inserted in a sentence
Addition - ending	ending added to a word (mans for man)
Examiner Help -	a word pronounced for the reader

Rate of reading was employed in the next analysis as a way of separating average and better readers, from weak readers. McCracken (1967) suggested a rate of 70 words per minute as the minimal oral reading rate for second grade pupils. This rate was used to determine whether there was a difference in performance based on rate.

TABLE 12

Percentage of Each Type of Error During Oral Reading

	FmA 70+	FmA -70	FmB 70+	FmB -70	All Scores Combined
General Accuracy	95.3	91.5	96.3	87.3	
Substitutions	.40	.37	.58	.48	.47
Omissions	.02	---	.03	---	.01
Omissions Endings	.31	.06	.14	.03	.14
Additions	.01	.32	.04	---	.06
Additions Endings	.19	.05	.14	.07	.12
Ex. Help	.06	.19	.06	.41	.19

*rate of 70 w/m or better **rate less than 70 w/m

The last column reveals the overall frequency of the type of errors to be expected during oral reading. Almost half of the errors result from substituting one word for another. The next highest category of word recognition error is accounted for by words not attempted and pronounced by the examiner. The next two highest types of errors are similar in that both have to do with the endings of words - usually either the addition or omission of s, ed, ing, or ly.

The breakdown by rate indicates that the more able reader is likely to substitute one word for another, while the weaker reader is more likely to accept help.

There are differences between the percentages achieved on the two forms, suggesting a variability among those adults tested. An additional factor is the unknown effect of sentence structure on the fluency of oral reading.

Another analysis of errors was undertaken to ascertain the effect of increased difficulty of a passage on the types of recorded word recognition errors. This was accomplished by comparing the percentage of error by the same groupings as were used in Tables 8 - 10. Two passages were compared for each group.

TABLE 13

Percentage of Errors for Two Passages for Each Group*

Group	I		II		III		IV		V	
Passage	3	4	4	5	4	5	4	5	5	6
Substitutions	.66	.54	.29	.53	.48	.70	.67	.57	.25	.31
Omissions	---	---	---	---	.09	---	---	---	.22	.02
" Endings	.05	.05	.25	.01	.17	.06	---	.08	.25	.56
Additions	---	---	---	.03	.09	.08	---	---	.03	.04
" Endings	.11	.14	.17	.08	.13	.05	.33	.21	.22	.07
Ex Help	.18	.29	.29	.35	.04	.11	---	.17	.03	---
Total No. Errors	38	35	24	72	23	64	9	24	32	45

*Complete Tables in Appendix K

Some of the adults who started with Passage 1 were so handicapped in reading that they did not read every passage, which gives the appearance of decreasing passage difficulty. The highest two passages read by Group I were selected because there are fewer extreme scores. The average error rate does indicate a slight change in difficulty (7.6 and 8.7 respectively). Apparently some strong readers started with Passage 2 (Group II) because the error rate did not show a rapid rise until the fifth selection.

In two instances there is some commonality in the changes produced by the more difficult passage. The addition of endings tends to decrease and examiner help tends to increase. Other errors change, but not with the same consistency among groups. As reading material becomes more difficult the adult reader's skills break down to a point where an increasing number of words are not attempted.

CONCLUSIONS

The objective of this project was to develop two forms of an informal test of reading performance which would measure word identification, oral and silent reading and comprehension of adults attending basic education classes. In addition, the project was to provide a description of the reading performance of these adults.

The silent reading portion of the test was dropped mainly because the administration time required might eliminate the test as a practical classroom instrument.

Word Lists. Six lists of words were developed from two larger word lists, the Botel List and the M.A. Mitzel List. With the exception of list I (M.A. Mitzel), the lists become increasingly more difficult for the reader, as designed. The lists not only provide an estimate of the reader's word identification power, but also furnish a basis for determining with which of the six passages to begin the oral reading test section.

Since the M.A. Mitzel List I was found to be easier than some of the Botel Lists, it seems likely that this list (I) can be given first to determine whether the Botel lists need to be administered (see Appendix I - Administration Word List). This means that for the better reader the Word Identification Test can be shortened by four lists, or eighty words.

Oral Reading Passages - Case Worker. A warm-up or readiness passage was developed to reduce the possibility that the first passage of the actual test would be affected by the reader's initial anxiety. Adult performance on this test indicated that this selection could also be used to help identify an appropriate starting level for the oral reading test.

Oral Reading Passages - Oral Reading Test. Two comparable forms each consisting of six passages of increasing difficulty with five factual questions each were assembled from materials used in ABE programs. Comparable passages were selected on the basis of specific levels of difficulty, similar error rates and appeal to the adults.

Comprehension. Factual recall was measured following each passage read. The average recall was 3.3 or 66 per cent. While the range was from 1.7 to 5.0, there was consistency within most groups and between groups. Thus it seems that these adults could obtain the literal message from the material they read.

Rate. The rates of reading suggested by McCracken (1967) were met by more than half of the readers through the fourth passage. Few readers attained the standard in passages at or above seventh level difficulty. Rate seems to be a sensitive indicator of the difficulty of a passage.

Error Types. The most frequent types of error are substitution, examiner help and addition and omission of endings. Weak readers show a higher incidence of needing examiner help than do the more able readers. Addition and

omission of endings in oral reading is a finding commensurate with general speech patterns. Thus, for the population tested, addition and omission of endings seems to be less an error of word recognition than it is an indicator of language background.

RECOMMENDATIONS

Two types of recommendations will be offered: (1) how this test may be employed and (2) further studies suggested by this project.

Test Construction. The project demonstrated that levels of difficulty in terms of word lists and readability levels discriminate among varying reading abilities of the adults in the local ABE program. This test was more carefully formulated than most of its kind because adult materials are not as carefully sequenced as basal reading materials. However, informal tests could be constructed from the materials being used in a particular program by using readability formulas to assess the difficulty of the passages. The Botel and Mitzel lists are useful to obtain a sample of graded words.

While the specific tests developed in this project could be used, each ABE program could develop its own instrument.

Test Interpretation. This project has described reading performance in terms of rate, type of errors and comprehension. Therefore, a reading performance can be checked against expectancies of reading behavior in each of these categories.

The testing provides an estimate of what the reader will do with material of similar difficulty. If a reader does well at one level, but requires examiner help, makes many substitutions and has poor comprehension at the next higher level of difficulty, the teacher can place the adult in materials appropriate to the learning objectives. Individual needs can be identified, such as poor rate, weak sight vocabulary, inaccurate reading or poor comprehension.

Thus, the test can be used to (1) estimate the levels of material difficulty a reader can handle, (2) identify specific skills requiring development and (3) measure progress or changes in performance.

Informal tests used with elementary and secondary pupils are interpreted in the same manner, but also specific criteria are employed to determine the level for instruction. One of the criteria is accuracy of reading. Ninety-five

per cent accuracy is considered minimal for the level at which a pupil receives instruction. When the accuracy drops to ninety per cent or lower the material is considered too difficult. In this project the adults who read 70 wpm or less on Form A were 91.5 per cent accurate, while the better readers were 95.3 per cent accurate. On Form B the poorer reader was 87.3 per cent accurate, while the better reader was 96.3 per cent accurate. These percentages approximate the standard used in other informals. However, before such a standard is set, it should be checked against rate of instructional progress.

Test Administration. The test directions are described in Appendix I. Several comments should be added. It is probably best if the adult reads the material from the actual source. Such a step makes the testing results more closely related to the materials to be employed for construction (e.g., type size, spacing, etc.). If a center decides to use this test or make one similar to it, permission to reprint the copy should be obtained from the publishing source. There is usually no difficulty in obtaining permission as long as the materials are not sold.

Further Studies. It seems reasonable to recommend expanding the baseline data, especially at the lower levels. Silent reading should be evaluated in another study to compare rate and comprehension with oral reading. A specific study should be made to determine the adults' ability to perform at various levels of comprehension. Performance on the informal adult reading test should be studied in relation to instruction so that some criteria for establishing instructional level can be determined.

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APPENDIX A

M. A. MITZEL WORD LIST

Part I

1. also _____
2. at _____
3. beside _____
4. bus _____
5. cost _____
6. dinner _____
7. duty _____
8. evening _____
9. fish _____
10. gasoline _____
11. he _____
12. house _____
13. join _____
14. line _____
15. mark _____
16. military _____
17. must _____
18. purse _____
19. out _____
20. picture _____
21. quality _____
22. right _____
23. see _____
24. single _____
25. stand _____
26. system _____
27. those _____
28. under _____
29. we _____
30. word _____

Part II

1. abbreviation _____
2. annoy _____
3. attribute _____
4. bullet _____
5. chill _____
6. comprehend _____
7. council _____
8. defy _____
9. dismiss _____
10. enjoyable _____
11. faith _____
12. frontage _____
13. groom _____
14. housing _____
15. inner _____
16. kidney _____
17. macaroni _____
18. morale _____
19. novel _____
20. partial _____
21. precious _____
22. raincoat _____
23. reveal _____
24. shelf _____
25. southwest _____
26. struggle _____
27. tennis _____
28. undergo _____
29. verify _____
30. width _____

APPENDIX A (cont'd)

BUCKS COUNTY WORD LIST

Pre-Primer		1[2]	
1. and	_____	1. about	_____
2. big	_____	2. as	_____
3. can	_____	3. barn	_____
4. down	_____	4. book	_____
5. for	_____	5. children	_____
6. go	_____	6. day	_____
7. here	_____	7. feet	_____
8. house	_____	8. friend	_____
9. in	_____	9. green	_____
10. it	_____	10. heard	_____
11. little	_____	11. him	_____
12. make	_____	12. if	_____
13. mother	_____	13. lost	_____
14. not	_____	14. work	_____
15. play	_____	15. name	_____
16. ride	_____	16. nose	_____
17. see	_____	17. our	_____
18. to	_____	18. pretty	_____
19. want	_____	19. school	_____
20. will	_____	20. some	_____

APPENDIX A (cont'd)

BUCKS COUNTY WORD LIST

	2^2		3^2	
1.	arm	_____	arrive	_____
2.	bought	_____	beat	_____
3.	candy	_____	bone	_____
4.	corner	_____	bundle	_____
5.	dollar	_____	chance	_____
6.	end	_____	coach	_____
7.	fat	_____	several	_____
8.	flower	_____	discover	_____
9.	grass	_____	eleven	_____
10.	hard	_____	express	_____
11.	hope	_____	flame	_____
12.	kitchen	_____	whisper	_____
13.	leg	_____	horn	_____
14.	most	_____	insist	_____
15.	park	_____	kill	_____
16.	pond	_____	lever	_____
17.	quiet	_____	mistake	_____
18.	rope	_____	offer	_____
19.	sell	_____	peach	_____
20.	smile	_____	possible	_____

APPENDIX B

THE CASE WORKER

Joe is sitting.

He is waiting.

"Are you Joe," asks Steve?

"Yes, that's me," said Joe.

"I am Steve, your caseworker."

"That's cool for you, baby."

"You never were on welfare, were you?"

"No, not me."

"I have some money for you. There are some rules for using this money. They will tell you how much money to live on. I have nothing to do with what they say. I can't give you one cent more. They want to be sure no one gets help he doesn't need. Do you get the picture, Joe?"

"Yeah, baby, I get the message. All I want to know is, did you find me a place to stay?"

"Yes, I've found you a place in a rooming house," said Steve taking a card from his desk. "The rent's cheap and the room is not special, but it's the best I can do on such short notice."

"OK, Mr. Baker, I'll go and see the room."

"Right! After you buy some clothes, I'll make appointments for you for jobs."

"That's OK. You make the appointments, and I'll be there. Don't you worry about it, Mr. Baker, I'll be there."

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APPENDIX C

Motivation: This is a story of a family and their home and their neighbors.

FORM A

Time:_____

OUR HOME AND OUR FRIENDS

This is our house.
Mary and I bought the house.
It is a good house. We live in the house.
It is our home and we like it.
Junior lives in our home, too.
The government helped us buy our home.
Mary, Junior and I live in this home.
We take good care of our home.
Mary and I have some friends.
Our friends are Mr. and Mrs. Henry Brown.
We live near the Browns.
Mr. and Mrs. Brown have a home.
The government helped Mr. and Mrs. Brown buy the house.
Mr. and Mrs. Brown take good care of their house.

_____1. What is the name of the man's wife? (Mary)

_____2. Who else lives in the home? (Junior)

_____3. Who helped them buy their home? (government)

_____4. Who are their friends? (Mr. and Mrs. Brown)

_____5. Who helped Mr. and Mrs. Brown to buy their house? (government)

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Word Count - 102
Readability - 1.9 (Spache)

Motivation: City driving takes more constant attention than highway or country driving. Find out some things a driver should know in city driving.

FORM A

Time:_____

DRIVING IN THE CITY

Driving in the city is dangerous.
One must look for the street signs in the city.
Street signs help people to drive the car carefully.
The signal light is a good street sign.
The red light says "Stop".
The green light says "Go".
The amber light says drive carefully.
At some corners there are "Stop" signs.
The car should be stopped for each "Stop" sign.
Sometimes there are the "Danger" signs.
This sign tells one to drive carefully.
Each street sign tells the driver something.
A driver should look for the street sign when he drives the car.

_____1. What should a driver be alert for in the city? (street signs)

_____2. What is the purpose of these signs? (to drive carefully)

_____3. What does the story say the amber light means? (drive carefully)

_____4. According to this story a driver must stop his car for what two signs? (red light, stop sign)

_____5. Besides the amber light in this story, what other sign means drive carefully? (Danger sign)

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Word Count - 98
Readability - 2.2 (Spache)

Motivation: Before an accident paralyzed him, Junius Kellogg played basketball for the Harlem Globetrotters. In a hospital, a nurse helped him recover. After that he helped others who had become paralyzed.

FORM A

Time:_____

"Nobody's Better Off Dead"

The young flyer wanted to die.
He lay with his face turned to the wall.
Hurt in a plane crash, he could not move from the neck down.

Then a tall man in a wheel chair wheeled himself into the flyer's room. "Hello," Junius Kellogg said.

But the flyer did not want to talk. "You are looking at a vegetable," he said, "I would be better off dead."

I was a vegetable myself, three years ago," said Kellogg. "Believe me, nobody is better off dead."

That was the first visit Kellogg made to the flyer's room. He came back often. Soon the flyer was able to swim. He too wanted to live.

_____1. How badly hurt was the flyer? (couldn't move from the neck down)

_____2. How did Junius Kellogg get into the flyer's room? (in a wheel chair)

_____3. What was J-nius like three years ago? (a vegetable or the flyer)

_____4. What did the flyer want to do? (die)

_____5. What happened that tells us the flyer was getting better? (able to swim)

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Word Count - 115
Readability - 2.7 (Spache)

Motivation: Everyday millions of people take their temperatures. Most people think that the higher the temperature, the sicker they are. See what some doctors say.

FORM A

Time:_____

ARE FEVERS HARMFUL?

For 200 years doctors have been asking the question: Is fever a friend or an enemy? Does fever show how sick a person is or does it show how hard his body is trying to get well? Doctors do not know the answer. But they are closer to the answer than ever before.

Are fevers harmful? The answer is both yes and no. Some fevers are very dangerous. They rise so high that life itself is in danger. For example, a fever of 109° injures the brain if the fever is not brought under control at once. It can be brought down by putting the person into a tub of ice water.

_____1. What is something doctors do not know about fevers? (whether they are good or bad)

_____2. When is a fever dangerous? (when it is very high)

_____3. What part of the body could be affected by a high fever? (the brain)

_____4. What must be done quickly when a person has a high fever? (bring the fever down)

_____5. Explain one way a high fever can be controlled. (put person in tub of ice water)

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Word Count - 112
Readability - 4-5 (Dale-Chall)

Motivation: The man in this story uses himself as an example. What is he trying to say to us?

FORM A

Time:_____

EQUAL EDUCATION

Since all men are born equal, all men are entitled to equal education. Mr. Hines believes this, and more - how can you discover how equal you are if you don't grab up all the experiences and all the education you can get.

As evidence for this belief, Mr. Hines tells everybody just to consider him. He has been a farmer, a factory worker, an automobile engine expert, a chief in the fire department, a gardener, and an army man in foreign countries firing at the enemy and fired at by the enemy in two world wars. Mr. Hines had lots of experience but not enough education.

_____1. Mr. Hines believes all men should be entitled to what? (equal education)

_____2. What, in addition to education, should a person have? (many experiences)

_____3. Name 2 things Mr. Hines has done.

_____4. How many times has Mr. Hines been a soldier? (twice)

_____5. What does Mr. Hines lack? (enough education)

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Word Count - 103
Readability - 7-8 (Dale-Chall)

Motivation: Some people have enough money to live comfortably, but don't know it. Here are some tips on how it can be done.

FORM A

Time:_____

A BUDGET IS HELPFUL

Individuals and families with budgets have safeguards against spending more money than they earn. Budgets help people plan to spend only what they can afford and buy only what they need.

To make a reliable budget, a family should first list all the expenses it expects in a month. Included in this list should be rent or mortgage payments for the home, utilities, food, any necessary house furnishings or equipment, clothes, transportation, medical care, personal need, insurance, recreation, contributions, taxes and if possible savings. Next the family should determine its income per month and allow enough money for each item within the limitations of that income.

_____1. What are two purposes of a budget? (spend what can be afforded and buy what is needed)

_____2. What is the first thing you do in making a budget? (list expected expenses)

_____3. What do you plan next? (how much to allow for each expense)

_____4. Name two expenses related to the home. (rent, utilities, etc.)

_____5. What is an expense of personal care? (clothing, medical, etc.)

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Word Count - 105
Readability - 9-10 (Dale-Chall)

APPENDIX D

Motivation: This is a story of a man who is looking for a car. Read this story out loud to find out what kind of car he finds.

FORM B

Time:_____

BUYING A NEW CAR

Ted wants a new car.
He wants a big car.
Ted wants a two-door car.
He talked to a car salesman.
The salesman wants $3,000.
"How much should I pay down?" asked Ted.
"$300," said the salesman.
Ted gave the salesman the money.
He wanted to drive his new car.
It was a beautiful car.
It had red seats.
He took his car home.
His family liked the car.

_____1. Name two things Ted wanted his car to be. (2-door, big, new)

_____2. How much did the car cost? ($3,000)

_____3. What was his down payment? ($300)

_____4. Where did he drive his car? (home)

_____5. Who else liked his car? (family)

Original Story - Eldora Gray

Word Count - 70
Readability - 1.6

Motivation: The man in this story had an idea on how to use some land. See how his idea worked.

FORM B

Time:_____

A ROCK FENCE

Long ago many large rocks lay all over the ground. There was a farmer who wanted to grow things on the land. But nothing would grow where the rocks were. So he started picking up the rocks. He carried them to the sides of the field. He made a fence of the rocks. Then all the farmers could see where his field was. Flowers grew along the rock fence. At first the rocks had been in the way. But soon they helped the farmer. And the farmer's rock fence made the field more beautiful.

_____1. What lay all over the ground? (rocks)

_____2. What did the man want to do with this land? (grow things)

_____3. Where did the farmers put the rocks? (sides of the fields)

_____4. How did the fence make the hill more beautiful? (flowers, rocks on land, etc.)

_____5. How did the rocks help the farmer? (marked his field, kept out animals, etc.)

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Word Count - 95
Readability - 2.1 (Spache)

Motivation: This story tells about a part of the early life of a famous American. Read this story out loud to find out about his unusual beginning.

FORM B

Time:_____

GEORGE WASHINGTON CARVER

George Washington Carver was America's first great Negro scientist. He was one of the greatest American scientists of any race. He helped many poor people of the South to have better lives.

George Washington Carver was born a Negro slave. He and his mother belonged to a family named Carver. Slaves were sold for money in those days. When he was a baby, some men stole him and his mother to sell and make money for themselves. Mr. Carver gave the men a horse to get his slaves back. They kept the mother but gave back the baby.

The Carvers were kind to this poor little baby.

_____1. Who was George Washington Carver? (Negro scientist)

_____2. How did he help the South? (helped poor people have better lives)

_____3. Who did he and his mother belong to? (Carvers)

_____4. What happened to him when he was a baby? (he was stolen)

_____5. How did Mr. Carver get him back? (gave the men a horse.

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Word Count - 101
REadability - 2.8 (Spache)

Motivation: Sports are popular in the United States. Here is a part of a story of a well-known sports figure.

FORM B

Time:_____

JACKIE ROBINSON

Jackie Robinson was the first Negro to play Big League baseball. When he signed the contract to play with the team, he knew it would not be easy. Players would call him names and be unkind. Fans would boo him. He could not fight back. He would have to play ball so well that Americans would know that the color of an athlete's skin was not important.

Jackie Robinson was born to a poor family in Georgia. When he was just a baby, his father left his family.

It was hard for his mother to make enough money to buy the clothes and food for her five children. But with her brother's help, she sent them all to school when they were big enough.

_____1. What is special about the person in this story? (first Negro to play Big League baseball)

_____2. What did Jackie think some players would do? (call him names and be unkind)

_____3. How did he plan to win a place in baseball? (be a great player)

_____4. Where was Jackie Robinson raised? (Georgia)

_____5. What did all his brothers and sisters do when they were old enough? (go to school)

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Word Count - 124
Readability - 4th Grade (DAle-Chall)

Motivation: We have been hearing about our space shots to the moon. This story tells about the Ranger space shots that will get important information for our astronauts.

FORM B

Time:_____

THE MOON, STEPPINGSTONE TO SPACE

Late in the 1960's, the hatch of a space ship will be cranked open. Men will climb through it and step down to the surface of the moon. Will they walk upon solid rock, or will they sink into deep lunar dust?

They will know the answer before they get there, for Ranger probes will already have crashed into the moon. During the rapid descent of these probes to the moon, sharp pictures of its surface will be televised to earth.

Just before impact, each probe will release a wooden ball intended to hit the moon without breaking. Inside the ball a small instrument will measure slight motions in the crust of the moon.

_____1. What will men to in the late 1960's? (land, walk on the moon)

_____2. The moon might be made of what two kinds of things? (solid rock or deep lunar dust)

_____3. What will the Ranger probes tell the space men? (type of lunar surface)

_____4. How will people on earth know about the moon's surface? (TV)

_____5. What will the small instrument measure on the moon? (motions)

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Word Count - 114
Readability - 7-8 (Dale-Chall)

Motivation: The basic laws of our country were written long ago. This selection tells about one part of these laws. Read carefully to find out what they mean to you.

FORM B

Time:_____

THE BILL OF RIGHTS

Before the Constitution could become the official law of our country, it had to be ratified by nine states. The states did not approve the document immediately. There was much controversy, and when the Constitution was finally ratified, most of the states agreed that a number of amendments to the document should be made.

In 1791, the first ten amendments, called the Bill of Rights, were adopted. They are called the Bill of Rights because they involve the basic liberties of individual citizens.

The Bill of Rights guarantees that citizens of the United States will have freedom of religion, freedom of speech, freedom of the press, and the right to assemble. It protects citizens against unreasonable punishment and insures the right to a speedy and public trial.

_____1. How many states had to ratify the Constitution? (nine)

_____2. What did many states agree had to be done to make the Constitution better? (amendments added)

_____3. How many amendments were added in 1791? (ten)

_____4. What are these amendments called? (Bill of Rights)

_____5. Name two things that are guaranteed by the Bill of Rights. (any two from last paragraph)

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Word Count - 129
Readability - 9-10 (Dale-Chall)

APPENDIX E

M. A. MITZEL WORD LIST

PART I

1. also
2. at
3. beside
4. bus
5. cost
6. dinner
7. duty
8. evening
9. fish
10. gasoline
11. he
12. house
13. join
14. line
15. mark
16. military
17. must
18. purse
19. out
20. picture
21. quality
22. right
23. see
24. single
25. stand
26. system
27. those
28. under
29. we
30. word

M. A. MITZEL WORD LIST

PART II

1. abbreviation
2. annoy
3. attribute
4. bullet
5. chill
6. comprehend
7. council
8. defy
9. dismiss
10. enjoyable
11. faith
12. frontage
13. groom
14. housing
15. inner
16. kidney
17. macaroni
18. morale
19. novel
20. partial
21. precious
22. raincoat
23. reveal
24. shelf
25. southwest
26. struggle
27. tennis
28. undergo
29. verify
30. width

BUCKS COUNTY WORD LIST

Pre-Primer	1[2]
1. and	1. about
2. big	2. as
3. can	3. barn
4. down	4. book
5. for	5. children
6. go	6. day
7. here	7. feet
8. house	8. friend
9. in	9. green
10. it	10. heard
11. little	11. hide
12. make	12. if
13. mother	13. lost
14. not	14. work
15. play	15. name
16. ride	16. nose
17. see	17. our
18. to	18. pretty
19. want	19. school
20. will	20. some

BUCKS COUNTY WORD LIST

2^2	3^2
1. arm	1. arrive
2. bought	2. beat
3. candy	3. bone
4. corner	4. bundle
5. dollar	5. chance
6. end	6. coach
7. fat	7. several
8. flower	8. discover
9. grass	9. eleven
10. hard	10. express
11. hope	11. flame
12. kitchen	12. whisper
13. leg	13. horn
14. most	14. insist
15. park	15. kill
16. pond	16. lever
17. quiet	17. mistake
18. rope	18. offer
19. sell	19. peach
20. smile	20. possible

APPENDIX F

THE CASE WORKER

Joe is sitting.
He is waiting.
"Are you Joe?" asks Steve.
"Yes, that's me," said Joe.
"I am Steve, your caseworker."
"That's cool for you, baby."
"You never were on welfare, were you?"
"No, not me."
"I have some money for you. There are some rules for using this money. They will tell you how much money to live on. I have nothing to do with what they say. I can't give you one cent more. They want to be sure no one gets help he doesn't need. Do you get the picture, Joe?"

"Yeah, baby, I get the message. All I want to know is, did you find me a place to stay?"

"Yes, I've found you a place in a rooming house," said Steve taking a card from his desk. "The rent's cheap

and the room is not special, but it's the best I can do on such short notice."

"OK, Mr. Baker, I'll go and see the room"

"Right! After you buy some clothes, I'll make appointments for you for jobs."

"That's OK. You make the appointments, and I'll be there. Don't you worry about it, Mr. Baker, I'll be there."

Adapted from: The Caseworker (Springboards)
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APPENDIX G

Example of Reader's Copy

OUR HOME AND OUR FRIENDS - Form A

This is our house.
Mary and I bought the house.
It is a good house. We live in the house.
It is our home and we like it.
Junior lives in our home, too.
The government helped us buy our home.
Mary, Junior and I live in this home.
We take good care of our home.

Mary and I have some friends.
Our friends are Mr. and Mrs. Henry Brown.
We live near the Browns.
Mr. and Mrs. Brown have a home.
The government helped Mr. and Mrs. Brown buy the house.
Mr. and Mrs. Brown take good care of their house.

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APPENDIX H

Example of Reader's Copy

BUYING A NEW CAR - Form B

Ted wants a new car.
He wants a big car.
Ted wants a two-door car.
He talked to a car salesman.
The salesman wants $3,000.
"How much should I pay down?" asked Ted.

"$300," said the salesman.
Ted gave the salesman the money.
He wanted to drive his new car.
It was a beautiful car.
It had red seats.
He took his car home.
His family liked the car.

Original Story - Eldora Gray

APPENDIX I

ADMINISTRATION OF ADULT READING TEST

1. Start with word list - "Mitzel-I." Have the student read each word on the list. Record each response with a ✓ if correct, or write in the incorrect response. When the list is completed, ask the student to re-read any words missed (e.g. "Say number 6 again for me," etc.). Check (✓) if the word is corrected, write the response if not correct. If the student makes more than 6 errors on this list, administer the pp, 1^2, 2^2, and 3^2 word lists. If the student makes 6 or fewer errors on "Mitzel-I" list proceed to list II.

Example		Explanation
also	✓	correct
at	✓	correct
beside	decide ✓	corrected on second trial
dinner	diner	still incorrect

Continue until the word lists are completed or until the student is unable to correctly complete more than half of the words on a list.

2. Caseworker - The "Caseworker" is a selection which becomes progressively more difficult. The task acts as a warm-up or readiness for the oral reading test, and provides the examiner with an estimation of where to begin the oral test.

The selection should be read orally at sight by the student. The examiner records the student's reading performance and the reading time. No questions are used after reading this selection.

Recording System

Error	Marking System	Comments
*Substitution	This is our ~~house.~~ horse	Said horse for house.
*Omission (whole word)	We take (good) care...	Left out the word "good."
Omissions (endings)	The red light says) "stop"	
*Addition (whole word)	The red light says to ^ "stop."	Put in the word "to."

Recording System (cont.)

Error	Marking System	Comments
Addition (ending)	The cars should be...	
Hesitation	The///signal...	Slash per second
*Examiner Help	The----~~signal~~P...	Signal" was pronounced for the student.
Repetition	This is our house.	Words or phrases repeated.

*Counted errors

Examiner Notes: Examiner should record any observations about the performance which will help in describing the student's reading. (e.g. finger pointing, head movements, conversation, etc.)

Special Notes in Counting Errors

Only the types of errors starred (*) are counted to assess the student's competency at each level of difficulty. In addition, there are other guides to follow to determine the errors to count.

1. Words missed which are repeated several times in a selection are counted only once.
2. Multiple or consecutive errors are counted as a single error when the second error was brought about in order to maintain the grammatical agreement.
3. The addition or omission of endings is not counted as an error.
4. Repetitions nor hesitations are counted as errors. If the student pauses at a word allow him 4 seconds to pronounce the word, then ask him if he knows or can attempt the word. If the word is unattempted, pronounce the word and record the help (e.g. The////~~signal~~P is ...).
5. Words spelled are not counted as an error if the word is correctly pronounced.

3. Oral Reading

The oral reading will follow the same general procedure employed with the "Case Worker." Prior to the reading the examiner reads a "motivation" statement to give the student some idea about the content of the selection. When the reading is completed the examiner will ask the student to answer the five printed questions on the examiner's recording sheet.

Thus the initial directions should direct the student to read the selection carefully and to remember what is read so that he can answer questions after he is finished reading.

The starting level may be guided by the following rule-of-thumb. (This is a guide which usually minimizes over-testing. On occasion a student may perform better or poorer than predicted.) If the errors on the Mitzel list I and II are equal to or greater than 30 and the Case Worker is read in 120 seconds or more with six or more errors the reading level is likely to be below 4th. Therefore, start with the beginning selection (Our Home and Our Friends or Buying a New Car.)

If the student makes 12 or fewer errors on the combined word list I and II, has a time of 95 seconds or less and 4 or fewer errors on the "Case Worker" he will generally read at or above the 7th level. Therefore start with the 4th level difficulty selection (Form A-"Are fevers Harmful?" or Form B-"Jackie Robinson").

Stop the oral reading when the student makes 10 or more of the following types of errors on 2 consecutive selections:

1. substitution
2. omission (whole word)
3. addition (whole word)
4. examiner help

The other errors discussed previously are recorded but not counted when establishing the competency of the reading performance. Stop the oral reading when the student answers less than 3 questions correctly on 2 consecutive selections.

2

4. Comprehension

Following the reading of each selection the examiner will ask the five questions. Each student response will be recorded. The word or words in parentheses is the intended answer, however, sometimes other answers are counted right as long as the information comes from the selection read. If the answer given does not relate to the question, then the examiner should repeat the question. The question is scored correct (✓), incorrect (0) or partially correct (1/2). The scoring may be done immediately or following the testing period.

APPENDIX J

Trial Selections for Oral Reading Test

Readability	No.	Title	Word Count
1.6	1	Buying a New Car	70
1.8	2	Work	65
1.9	3	Birds of the City	84
1.9	4	Our Home - Our Friends	114
2.0	5	The Big Fish	73
2.0	6	A Hard Day's Work	92
2.1	7	A Rock Fence	95
2.2	8	Driving in the City	98
2.2	9	The Walking Salesman	99
2.4	10	The Hero of Stone Mountain	106
2.7	11	Nobody's Better Off Dead	99
2.8	12	Rockets Away	105
2.8	13	George Washington Carver	101
3.0	14	Jesse Owens - Champion	104
3.3	15	A Sad End	108
3.3	16	Gwendolyn Brooks, Poet	101
4-5	17	Johnny Appleseed	104
4-5	18	Good Manners	108
4-5	19	Are Fevers Harmful?	127
4-5	20	Jackie Robinson	113
5-6	21	One Against A Gang	105
5-6	22	The Butterfly That Travels	108
5-6	23	My Job Was Taken By a Button	103
7-8	24	The Moon, Steppingstone to Space	114
7-8	25	Equal Education	103
9-10	26	A Budget is Helpful	105
9-10	27	The Bill of Rights	126
Variable		The Case Worker	194

APPENDIX K

Percentage of Word Recognition Errors for each Passage - Both Forms

GROUP I (n=9)

	1	2	3	4
Substitutions	.29	.42	.66	.54
Omissions	---	---	---	---
" Endings	.06	.16	.05	.03
Additions	---	---	---	---
" Endings	.12	.12	.11	.14
Ex. Help	.53	.30	.18	.29
No. of Errors	90	43	38	35

GROUP II (n=8)

	2	3	4	5
Substitutions	.30	.73	.29	.53
Omissions	---	---	---	---
" Endings	.30	.03	.25	.01
Additions	.06	---	---	.03
" Endings	.25	.08	.17	.08
Ex. Help	.08	.16	.29	.35
No. of Errors	36	37	24	72

APPENDIX K (cont.)

	3	4	5	6
Substitutions	.50	.48	.70	.52
Omissions	---	.09	---	.01
" Endings	.23	.17	.06	.20
Additions	---	.09	.08	.01
" Endings	.27	.13	.05	.15
Ex. Help	---	.04	.11	.11
No. of Errors	22	23	64	88

GROUP IV (n=14)

	4	5	6
Substitutions	.67	.54	.57
Omissions	---	---	---
" Endings	---	.08	.17
Additions	---	---	.03
" Endings	.33	.21	.11
Ex. Help	---	.17	.11
No. of Errors	9	24	35

APPENDIX K (cont.)

GROUP V (n=14)

	5	6
Substitutions	.25	.31
Omissions	.22	.31
" Endings	.25	.56
Additions	.03	.04
" Endings	.22	.07
Ex. Help	.03	---
No. of Errors	32	45

APPENDIX L

Comparison of Word Recognition Errors, Rate, Comprehension and Word List Performance

Gp I	1			2			3			4				Case Worker							
S/ Form	R.*	E.	C.	R.	E.	C.	R.	E.	C.	R.	E.	C.		R.	E.	PP	1^2	2^2	3^2	I	II
4A	82	6	3.5	-	7	3	86	5	2	85	7	.5		93	12	2	2	3	12	10	-
9A	-	14/34	**											53	17/36**	12	-	-	-	-	-
13A	91	6	5	71	6	3.5	38	3	3	41	9	3		56	16	1	2	4	2	7	12
22A	50	4	5	30	7	5								30	28	4	6	6	15	-	-
3B	70	10	5	63	6	5	34	16	0	54	15	3		75	20	0	5	6	15	-	-
19B	79	6	5	97	3	5	144	6	4	99	4	5		60	6	0	3	1	5	7	19
26B	28	14	0											53	17/36	12	-	-	-	-	-
27B	32	6	5	25	14	5								30	28	4	6	6	15	-	-

Gp II	1			2			3			4			5			6							
1A				86	1	4.5	92	2	5	87	0	2.5	69	7	4	68	10	1.5	97	2	0	1	2	7	6	16
2A				83	11	2.5	64	9	3	56	7	4	50	8+	inc				64	6	0	1	4	8	10	-
11A				125	7	4	83	9	4	118	3	4.5	66	8	5	73	9	4	138	2	0	1	7	7	6	12
30A				107	8	3	138	6	3.5	145	5	4	119	7	4.5	107	15	4.5	144	5	0	2	3	4	3	11
1B				85	1	5	77	0	5	83	1	5	38	8	0				87	3	0	0	2	3	2	9
12B				85	4	5	86	5	5	84	1	5	57	9	4	54	20	5	110	11	1	3	3	5	4	14
13B				110	4	5	54	5	4	68	2	5	37	20	2	39	20	1.5	80	5	1	6	4	10	5	26
22B				78	0	5	83	1	1	81	3	3	62	4	0				97	0	0	0	0	0	0	3

*R (Rate of Reading)
E (Total Word Recognition Errors)
C (Total Comprehension)

**Passage too difficult to complete

APPENDIX L (cont.)

Comparison of Word Recognition Errors, Rate, Comprehension and Word List Performance

Gp III

S/ Form	R*	E	C	R	E	C	R	E	C	R	E	C	Case Worker R	E	PP	1^2	2^2	3^2	I	II
5A	143	0	5	177	0	5	147	0	5	131	0	4	185	1	0	0	2	0	0	3
10A	147	1	3.5	156	0	4.5	151	1	5	134	1	4	155	1	0	2	0	1	1	5
19A	103	0	3	100	1	4	95	2	5	77	3	3.5	97	6	0	2	2	0	3	9
27A	111	2	5	107	3	4	100	2	5	84	5	3	112	2	1	0	2	2	1	8
2B	117	5	3.5	118	2	3	.55	8	2	44	14	3	164	8	0	1	0	4	3	9
5B	116	0	2	128	1	2	89	3	2.5	62	4	2.5	124	0	0	0	1	0	0	3
6B	112	0	4	143	0	5	118	7	3	119	5	2	142	2	0	0	0	1	1	6
9B	138	1	4	138	1	4.5	99	6	2	80	8	0	111	4	0	0	1	2	1	7
10B	121	0	2	152	3	4	120	4	4	127	11	1	153	3	0	0	0	1	1	5
11B	108	1	3	138	1	5	63	11	4	57	14	0	131	3	0	0	1	4	2	13
20B	126	5	4	149	1	5	110	9	3				166	0	0	0	2	4	0	10
21B	141	1	4	109	3	5	146	6	5	93	13	5	124	8	0	0	3	3	1	5
25B	75	5	3	64	7	4	52	5	1	42	9	1	102	3	0	0	1	1	0	9

*R (Rate of Reading)
E (Total Word Recognition Errors)
C (Total Comprehension)

APPENDIX L (cont.)

Comparison of Word Recognition Errors, Rate, Comprehension and Word List Performance

Gp IV S/ Form	4 R	4 E	4 C	5 R	5 E	5 C	6 R	6 E	6 C	Case Worker R	Case Worker E	PP	1^2	2^2	3^2	I	II
6A	153	1	4	143	6	4	134	7	3.5	194	0	0	0	0	4	1	8
7A	146	0	5	103	3	5	105	1	3.5	140	0	0	0	0	1	0	7
12A	95	1	3	100	0	4	89	1	2	102	1	0	1	1	1	0	3
14A	90	1	3.5	129	0	5	114	0	5	144	3	0	0	0	0	0	3
15A	112	1	4.5	76	0	4	68	2	2	100	3	0	0	1	0	0	2
20A	124	0	3	95	1	3	91	3	4.5	98	1	0	0	0	3	0	2
25A	137	0	5	131	0	4	121	0	5	169	0	0	0	0	0	0	1
26A	134	0	4	129	0	5	100	0	4	149	0	0	0	1	0	0	4
8B	155	1	5	99	1	3	62	10	15	164	1	0	0	0	2	0	8
14B	196	0	5	159	0	4	138	0	4	155	0	0	0	0	0	0	0
16B	158	3	4	137	1	3.5	125	2	3	171	4	0	0	1	1	0	5
17B	138	0	5	74	10	1	85	4	2	147	3	0	0	0	1	0	6
18B	181	1	5	127	2	5	96	3	2	174	0	0	0	0	0	0	4

R (Rate of Reading)
E (Total Word Recognition Errors)
C (Total Comprehension)

APPENDIX L (cont.)

Comparison of Word Recognition Errors, Rate, Comprehension and Word List Performance

Gp V	5			6			Case Worker		PP	1^2	2^2	3^2	I	II
S/ Form	R*	E	C	R	E	C	R	E						
8A	137	0	5	107	0	4	151	0	0	0	0	0	0	1
3A				137	0	4	164	0	0	0	0	0	0	0
16A	98	0	5	110	6	5	138	1	0	0	0	0	0	4
17A	179	3	5	140	2	4.5	195	1	0	0	1	0	1	1
18A	158	3	5	131	5	4.5	166	3	0	0	1	0	0	5
21A	140	4	5	118	7	4	106	0	0	0	0	0	0	2
23A	199	0	5	158	0	4	197	0	0	0	0	0	0	0
24A	176	0	4	131	0	4	185	0	0	0	0	0	0	0
28A	172	6	3.5	114	8	3.5	224	4	0	0	0	1	1	5
29A	176	1	5	180	3	5	174	0	0	1	1	1	0	2
4B				172	0	5	197	0	0	0	0	0	0	0
7B	116	0	4	112	0	5	151	0	0	0	0	0	0	0
15B	107	8	3.5	-	4	2	125	5	0	0	0	1	0	2
24B	120	6	2	129	10	3	162	3	0	0	0	1	0	3

*R (Rate of Reading)
E (Total Word Recognition Errors)
C (Total Comprehension)

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